

United States Patent [19]

Hetz

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[54] ULTRASOUND DEVICE FOR SECTOR SCANNING

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[58] Field of Search 128/660, 661; 73/780, 73/628, 641, 633, 634; 310/36, 156, 216; 336/217

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[57] ABSTRACT

An ultrasound device for sector scanning which includes an ultrasound transmitting/receiving system. The system is housed in a compact cylindrical applicator housing which contains ultrasound transducer heads and associated ultrasound transducer elements at both ends of the applicator housing. Each of the two ultrasound transducer heads is rotatable within the applicator housing for performing sector scanning. A single drive mechanism rotates or swivels reciprocally both transducer heads so that undesirable inertial forces are cancelled or compensated. A guiding element pivotally supports the applicator housing so that the housing can be rotated and one or the other of the two ultrasound transducer heads be used. The guiding element also provides the enclosure for the electronics associated with the ultrasound applicator.

10 Claims, 4 Drawing Figures

